General

Guideline Title

American Gastroenterological Association Institute guideline on the management of Crohn's disease after surgical resection.

Bibliographic Source(s)

Nguyen GC, Loftus EV Jr, Hirano I, Falck-Ytter Y, Singh S, Sultan S, AGA Institute Clinical Guidelines Committee. American Gastroenterological Association Institute guideline on the management of Crohn's disease after surgical resection. Gastroenterology. 2017 Jan;152(1):271-5. [8 references] PubMed

Guideline Status

This is the current release of the guideline.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Recommendations

Major Recommendations

Definitions for the quality of evidence (High, Moderate, Low, Very low) and strength of recommendation (Strong, Conditional) are provided at the end of the "Major Recommendations" field.

1. In patients with surgically induced remission of Crohn's disease (CD), the American Gastroenterological Association (AGA) Institute suggests early pharmacological prophylaxis over endoscopy-guided pharmacological treatment. (Conditional recommendation, Very low quality of evidence)
   Comments: Patients, particularly those at lower risk of recurrence, who place a higher value on avoiding the small risks of adverse events from pharmacological prophylaxis and a lower value on the potential risk of early disease recurrence may reasonably select endoscopy-guided pharmacological treatment over prophylaxis.

2. In patients with surgically induced remission of CD, the AGA suggests using anti-tumor necrosis factor (TNF) therapy and/or thiopurines over other agents. (Conditional recommendation, Moderate quality of evidence)
   Comments: Patients at lower risk for disease recurrence or who place a higher value on avoiding the small risk of adverse events of thiopurines and/or anti-TNF treatment and a lower value on a modestly increased risk of disease recurrence may reasonably choose nitroimidazole antibiotics (for 3–12 months).

3. In patients with surgically induced remission of CD, the AGA suggests against using mesalamine (or other 5-aminosalicylates), budesonide, or probiotics. (Conditional recommendation, Low quality of evidence and Very low quality of evidence)
4. In patients with surgically induced remission of CD receiving pharmacological prophylaxis, the AGA suggests postoperative endoscopic monitoring at 6 to 12 months after surgical resection over no monitoring. (Conditional recommendation, Moderate quality of evidence)

5. In patients with surgically induced remission of CD not receiving pharmacological prophylaxis, the AGA recommends postoperative endoscopic monitoring at 6 to 12 months after surgical resection over no monitoring. (Strong recommendation, Moderate quality of evidence)
6. In patients with surgically induced remission of CD with asymptomatic endoscopic recurrence, the AGA suggests initiating or optimizing anti-TNF and/or thiopurine therapy over continued monitoring alone. (Conditional recommendation, Moderate quality of evidence)
   Comments: Patients who place a higher value on avoiding the small risk of adverse events of thiopurines or anti-TNF treatment and a lower value on the increased risk of clinical recurrence following asymptomatic endoscopic recurrence may reasonably choose continued endoscopic monitoring.

Definitions

Grading of Recommendations Assessment, Development and Evaluation (GRADE) Definitions of Quality/Certainty of the Evidence

High	The Committee is very confident that the true effect lies close to that of the estimate of the effect.
Moderate	The Committee is moderately confident in the effect estimate. The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.
Low	The Committee's confidence in the effect estimate is limited. The true effect may be substantially different from the estimate of the effect.
Very low	The Committee has very little confidence in the effect estimate. The true effect is likely to be substantially different from the estimate of effect.

GRADE Definitions on Strength of Recommendation

	Wording in Guideline	**For the Patient**	**For the Clinician**
Strong	"The AGA recommends..."	Most individuals in this situation would want the recommended course of action and only a small proportion would not.	Most individuals should receive the recommended course of action. Formal decision aids are not likely to be needed to help individuals make decisions consistent with their values and preferences.
Conditional	"The AGA suggests..."	The majority of individuals in this situation would want the suggested course of action, but many would not.	Different choices will be appropriate for different patients. Decision aids may well be useful helping individuals making decisions consistent with their values and preferences. Clinicians should expect to spend more time with patients when working towards a decision.

Clinical Algorithm(s)

An algorithm for the management of Crohn's disease after surgical resection is provided on the American Gastroenterological Associate Institute Web site .

Scope

Disease/Condition(s)

Crohn's disease

Guideline Category

Management

Prevention

Treatment

Clinical Specialty

Colon and Rectal Surgery

Gastroenterology

Internal Medicine

Preventive Medicine

Intended Users

Physicians

Guideline Objective(s)

- To present the official recommendations of the American Gastroenterological Association (AGA) Institute on the management of Crohn's disease (CD) after surgical resection
- To outline strategies to reduce disease recurrence in patients who have achieved remission following bowel resection
- To address the role of postoperative pharmacological prophylaxis and endoscopic monitoring in patients with an ileocolonic anastomosis who are asymptomatic without macroscopic evidence of CD after surgical resection
- To reduce practice variation and promote high-value care

Target Population

Patients with an ileocolonic anastomosis who are asymptomatic without macroscopic evidence of Crohn's disease (CD) after surgical resection

Note: The recommendations are not applicable to patients with small-bowel anastomoses that are not accessible by colonoscopy, those who have residual disease following surgical resection, or those who already have clinical symptoms related to active CD.

Interventions and Practices Considered

1. Early pharmacological prophylaxis versus endoscopy-guided pharmacological treatment
2. Anti-tumor necrosis factor (TNF) monotherapy
3. Thiopurine monotherapy
4. Antibiotics alone
5. Postoperative endoscopic monitoring at 6 to 12 months after surgical resection versus no monitoring

Note: The following were considered but not recommended: 5-aminosalicylates, budesonide, probiotics.

Major Outcomes Considered

- Rates of clinical and endoscopic recurrence
- Adverse effects
- Cost-effectiveness

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Formulation of Clinical Questions

Using the PICO format, which frames a clinical question by defining a specific population (p), intervention (i), comparator (c), and outcomes (O), the team finalized four questions (see Table 1 in the technical review [see the "Availability of Companion Documents" field]). Potentially relevant patient-important outcomes were considered and rated in terms of importance. The following outcomes were considered critical for decision making: prevention of surgical recurrence, clinical recurrence, and endoscopic recurrence of Crohn's disease (CD). However, data on surgical recurrence were limited because the majority of studies were short term and not powered to show differences in rates of surgical recurrence. Hence, for this review, the technical review panel used the presence of endoscopic recurrence as a strong surrogate predictor of future surgical recurrence based on data from a pivotal prospective cohort study supporting this association. Serious adverse events leading to treatment discontinuation were considered to be important for decision making. Given the paucity of data on serious adverse events, specifically in the postoperative setting, indirect evidence from luminal CD or other forms of inflammatory bowel disease was used to inform evidence for this outcome.

Search Strategy and Study Selection Criteria

A systematic literature search of multiple electronic databases was conducted by an experienced medical librarian using a combination of controlled vocabulary terms supplemented with keywords. The search was conducted from inception to May 31, 2015, and the databases included Ovid Medline In-Process and Other Non-Indexed Citations, Ovid MEDLINE, Ovid EMBASE, Ovid Cochrane Database of Systematic Reviews, and PsycINFO.

Based on the PICOs, randomized controlled trials (RCTs) and observational studies in adults with CD who underwent surgical resection (to achieve surgically induced remission), comparing different management strategies (routine early post-operative pharmacological prophylaxis vs. endoscopy-guided initiation of therapy, only in cases of endoscopic recurrence of CD; routine assessment of endoscopic recurrence of CD after surgical resection vs. no routine endoscopic assessment) or pharmacological interventions (comparative effectiveness of different agents used for luminal CD in preventing recurrence of CD; comparative effectiveness of different agents used for luminal CD for treating asymptomatic endoscopic recurrence of CD), for prevention and/or treatment of recurrence of CD at least 6 months after surgical resection, were included. For questions for which moderate-high quality evidence could be obtained from RCTs, observational studies (which are inherently biased) were not included in evidence synthesis but were used as supporting evidence; when there were insufficient RCTs that offered only low or very low quality evidence, observational studies were reviewed and considered for possible inclusion in evidence synthesis.

Two investigators independently reviewed the title and abstract of studies identified in the search to exclude studies that did not address the focused question, based on pre-specified inclusion and exclusion criteria. The full text of the remaining articles was examined to determine whether it contained relevant information. Conflicts in study selection at this stage were resolved by consensus, referring back to the original article in consultation with technical review authors. This search was supplemented with a recursive search of the bibliographies of recently published systematic reviews on this topic, to identify any additional studies. Only English language and human studies were included. Filters were applied to exclude conference proceedings, editorials, letters to the editor and case reports. Refer to the online supplement for detailed information on search strategy (see the "Availability of Companion Documents" field).

In addition to systematically reviewing studies informing the quality of evidence for PICOs, a search was conducted of studies evaluating the cost-effectiveness of different strategies and medications, as well as the values and preferences of patients, in relation to outcomes and treatment alternatives for management of CD.

Patients' Values and Preferences

A key aspect in decision-making and developing recommendations in the management of patients with CD after surgical resection is incorporating patients' values and preferences. For the technical review, data on patients' values and preferences were derived from a systematic review on patient preferences for treatment options and process of care in inflammatory bowel disease (IBD) published in 2013, and the search was updated to 2016.

Number of Source Documents

The abstracts of 1,131 potentially relevant articles were reviewed. A total of 35 studies in 37 publications were included in the technical review in support of the guideline recommendations. Refer to Supplementary Figure 2 in the technical review (see the "Availability of Companion Documents" field) for the flow sheet summarizing study identification and selection for each review question.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Grading of Recommendations Assessment, Development and Evaluation (GRADE) Definitions of Quality/Certainty of the Evidence

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Methods Used to Analyze the Evidence

Meta-Analysis

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

Data Extraction and Statistical Analysis

Data abstraction was independently conducted in duplicate by 2 investigators at the Pacific Northwest Evidence-based Practice Center. Disagreements or questions of accuracy were resolved by discussion and consensus with the technical review team (details are reported in the Supplementary Appendix [see the "Availability of Companion Documents" field]).

Pooled relative risk (RR) or odds ratios (OR) and 95% confidence intervals (CIs) were calculated using the Mantel–Haenszel fixed-effects model (in the absence of conceptual heterogeneity and if <5 studies) or the DerSimonian–Laird random-effects model. Statistical heterogeneity was assessed using the I^2 statistic. Small study effects were examined using funnel plot symmetry and Egger's regression test, although it is important to recognize that these tests are unreliable when the number of studies is <10. Direct comparisons were performed using RevMan v5.2 (Cochrane Collaboration, Copenhagen, Denmark). Due to a paucity of head-to-head trials of active agents for prevention of recurrence of Crohn's disease (CD) to adequately inform comparative efficacy of different pharmacological interventions, a random-effects Bayesian network meta-analysis (NMA) using Markov chain Monte Carlo methods in WinBUGS 1.4.3 (MRC Biostatistics Unit, Cambridge, England) following methods described by Lu and Ades was performed to calculate the pairwise OR and 95% credible interval (Bayesian CI). Details are reported in the Supplementary Appendix; see also Supplementary Figure 3A and B in the technical review.

Quality of Evidence

The quality of evidence derived from the direct meta-analysis and NMA was judged using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) framework (see the "Rating Scheme for the Strength of the Evidence" field). For questions of comparative efficacy of different pharmacological interventions for which effect estimates were derived from the direct meta-analysis and NMA, the technical review panel used the following approach. When direct evidence was available from head-to-head comparisons, this was considered the best available evidence. If there were no direct comparisons between 2 interventions (and, hence, no direct meta-analysis was feasible), effect estimates

from the NMA were used. In applying GRADE to NMA, first the panel judged the quality of evidence for direct comparisons and then they rated the indirect estimates, starting at the lowest rating of the 2 pairwise estimates that contributed as first-order loops. The panel rated down further for imprecision or intransitivity (i.e., dissimilarity between studies in terms of clinical or methodological characteristics).

Evidence-to-Decision Framework

Because the technical review was used to inform the development of clinical guidelines, besides a comprehensive risk-benefit analysis and the accompanying quality of evidence, information about additional factors such as patients' values and preferences, cost-effectiveness, and resource utilization were also considered. These data are summarized in the technical review.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

The American Gastrointestinal Association (AGA) process for developing clinical practice guidelines follows the standards set by the Institute of Medicine. The Grading of Recommendations Assessment, Development and Evaluation (GRADE) framework was used to evaluate the certainty of the evidence and grade the strength of recommendations. Understanding of this guideline will be enhanced by reading relevant portions of the technical review (see the "Availability of Companion Documents" field. The guideline panel and the authors of the technical review met face to face on May 24, 2016, to discuss the findings from the technical review. The guideline authors subsequently formulated the recommendations. Although quality of evidence (see the "Rating Scheme for the Strength of the Evidence') field was a key factor in determining the strength of recommendation (see the "Rating Scheme for the Strength of the Recommendations" field), the panel also considered the balance between benefit and harm of interventions, patients' values and preferences, and resource utilization.

Rating Scheme for the Strength of the Recommendations

Grading of Recommendations Assessment, Development and Evaluation (GRADE) Categories on Strength of Recommendation

	Wording in Guideline	For the Patient	For the Clinician
Strong	"The AGA recommends..."	Most individuals in this situation would want the recommended course of action and only a small proportion would not.	Most individuals should receive the recommended course of action. Formal decision aids are not likely to be needed to help individuals make decisions consistent with their values and preferences.
Conditional	"The AGA suggests..."	The majority of individuals in this situation would want the suggested course of action, but many would not.	Different choices will be appropriate for different patients. Decision aids may well be useful helping individuals making decisions consistent with their values and preferences. Clinicians should expect to spend more time with patients when working towards a decision.

Cost Analysis

There is a paucity of data on cost-effectiveness of different strategies for managing Crohn's disease (CD) after surgical resection, and studies relevant to each clinical question are summarized below.

Clinical Question #1

There is limited cost-effectiveness data comparing a strategy of routine early post-operative pharmacologic prophylaxis vs. endoscopy-guided therapy for prevention of CD recurrence after surgical resection. In a decision-analysis, investigators evaluated the comparative cost-effectiveness of five strategies for decreasing the risk of clinical recurrence (CR) 1 year after surgically-induced remission of CD – no treatment, routine early azathioprine monotherapy, routine early antibiotic monotherapy, routine early infliximab, and tailored endoscopy-guided therapy with infliximab, in which there was no early post-operative prophylaxis, but initiation of infliximab only in patients with endoscopic recurrence (≥i2) at 6 months after surgical resection. In a sub-analysis, the investigators observed that, while routine early postoperative prophylaxis with infliximab may be more

effective than endoscopy-guided infliximab therapy, it was significantly more expensive, with an incremental cost-effectiveness ratio of $629,500/quality-adjusted life-year (QALY) gained, substantially above standard thresholds for cost-effectiveness. It is unclear whether replacing infliximab with azathioprine, antibiotics, or other medications in either or both management strategies (routine early postoperative pharmacologic prophylaxis vs. endoscopy-guided therapy) would modify the cost-effectiveness relationship.

Clinical Question #2

In a decision-analysis, investigators evaluated the comparative cost-effectiveness of five strategies for decreasing risk of CR 1 year after surgically-induced remission of CD – no treatment, routine early azathioprine monotherapy, routine early antibiotic monotherapy, routine early infliximab, and tailored endoscopy-guided therapy with infliximab in which there was no early post-operative prophylaxis but infliximab was initiated only in patients with endoscopic recurrence (ER) (≥i2) at 6 months following surgical resection. In the base-case scenario, the assumed risk of CR was 24% in the no treatment group, and the relative risk reduction in recurrence with azathioprine, antibiotics and infliximab was 41%, 77%, and 99%, respectively. Of note, the corresponding estimates for relative risk reduction derived from the analysis for azathioprine, antibiotics and anti-tumor necrosis factor (TNF) monotherapy would have been 65%, 48%, and 49%, respectively.

In their cost-effectiveness analysis, routine early infliximab therapy was the most effective strategy (quality-adjusted life years [QALY], 0.83), followed by antibiotic monotherapy (QALY, 0.82), endoscopy-guided infliximab therapy (QALY, 0.82), azathioprine monotherapy (QALY, 0.81) and no treatment (QALY, 0.80). In a hypothetical low-risk scenario, all strategies were clustered together within a QALY range of 0.01, whereas the comparative effectiveness of strategies became more divergent, albeit in the same order, with higher hypothetical risks of disease recurrence (1-year risk of recurrence of 50%–78%). However, in cost-effectiveness analysis, antibiotic monotherapy was the most cost-effective strategy in all baseline risk categories, except in the low-risk scenario, where azathioprine monotherapy was most cost-effective. Routine early infliximab monotherapy was not deemed cost-effective across the entire spectrum of hypothetical disease recurrence rates ($6,667,000/QALY in low risk, $1,266,801/QALY in high risk, $722,348/QALY in the highest risk group, as compared to antibiotics). However, in sensitivity analysis, extending the time horizon to 3-years in the very high-risk scenario (risk of CR at 1 year, 0.78), the cost per QALY gained with routine early infliximab decreased to $459,158/QALY compared with antibiotic monotherapy.

In sensitivity analysis, when the effectiveness of azathioprine was estimated at a relative risk reduction of 65% (closer to estimates derived from this technical review), azathioprine was more cost-effective than antibiotic monotherapy. The addition of 5-aminosalicylate (5-ASA) as another treatment option did not significantly alter results – 5-ASA was dominated by (i.e., comparatively not cost-as effective as) antibiotic monotherapy at all levels of baseline risk, and was less effective and more expensive than azathioprine monotherapy as well as endoscopy-guided infliximab therapy.

Clinical Question #3

No specific cost-effectiveness analyses comparing a strategy of active management with routine endoscopic evaluation and treatment step-up vs. no endoscopic monitoring in the management of CD after surgical resection were identified. However, a cost analysis that accompanied the study that informed this question reported that the median healthcare cost was non-significantly higher in the active management arm (with endoscopic monitoring and treatment step up) vs. the standard care arm.8 It was estimated that AU$861 (about US$640) was spent over 18 months to prevent one ER.

Clinical Question #4

There are no specific cost-effectiveness analyses pertaining to the comparative effectiveness of different pharmacologic interventions for reducing risk of disease recurrence in patients in clinical remission but with established ER after surgical resection of CD.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

This document presents the official recommendations of the American Gastroenterological Association (AGA) Institute on the management of Crohn's disease (CD) after surgical resection. The guideline was developed by the AGA's Clinical Guidelines Committee and approved by the AGA Governing Board.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

- The benefit of routine early postoperative pharmacological prophylaxis over endoscopy-guided therapy (i.e., treatment only if evidence of asymptomatic endoscopic recurrence at 6–12 months) in decreasing the risk of recurrence of Crohn's disease (CD) is uncertain.
- Several therapies appear to reduce the risk of recurrence, although some may be preferred due to differential effects on clinical and endoscopic recurrence and varying levels of quality of evidence. Anti-tumor necrosis factor (TNF) monotherapy and thiopurine monotherapy probably result in the largest reductions in disease recurrence. Antibiotic monotherapy probably reduces recurrence of CD after surgical resection, but estimates of effect were not as strong as with anti-TNF or thiopurine monotherapy, particularly for preventing endoscopic recurrence. Thiopurines combined with antibiotics may reduce the risk of recurrence of CD. There is unclear benefit with the use of 5-aminosalicylates (5-ASAs), probiotics, or budesonide.
- Routine endoscopic monitoring 6 to 12 months after surgical resection, with endoscopy-guided treatment, is probably superior to no endoscopic monitoring, regardless of early postoperative management, in decreasing the risk of recurrence of CD.
- Based on indirect evidence derived from the effect of anti-TNF and/or immunomodulator therapy on maintenance of remission in patients with luminal CD with medically induced remission, anti-TNF monotherapy or thiopurine monotherapy probably reduce the risk of recurrence in patients with CD with asymptomatic endoscopic recurrence after surgically induced remission.

See the technical review (see the "Availability of Companion Documents" field) for additional information about potential benefits.

Potential Harms

- The estimated rates of serious infections, malignancy, and intolerance (discontinuation of therapy due to adverse events) with anti-tumor necrosis factor (TNF) monotherapy are 7.6 to 10.9 per 100 person-years, 0.44 per 100 person-years, and 9.8%, respectively. Corresponding rates of serious infections, malignancy, and intolerance with thiopurine monotherapy are 9.6 per 100 person-years, 0.75 per 100 person-years, and 17.6%, respectively. In addition, there are rare serious adverse events with anti-TNF monotherapy (including demyelinating diseases and worsening of heart failure) and with thiopurines (pancreatitis, fever, and nodular regenerative hyperplasia). Anti-TNF therapy has the additional burden of requiring specialized, nonoral administration (either infusion or injections) and corresponding risks of infusion/injection site reactions. Both anti-TNF therapy and thiopurine-based therapy also require periodic laboratory monitoring.
- Six- to 12-month therapy with imidazoles or fluoroquinolones is poorly tolerated (the pooled rate of discontinuation of therapy based on included trials is 23.5%). Long-term use of imidazoles has been associated with risk of peripheral neuropathy.
- Endoscopy-guided therapy puts patients at risk for delaying treatment if recurrence occurs before 6 to 12 months (20%–30% clinical recurrence, <5% surgical recurrence). Additional risks associated with this strategy include procedure-related complications and the added burden and costs related to endoscopy. Moreover, some patients in the endoscopy-guided therapy group who have undergone surgery for CD and not started on prophylactic therapy may have a higher perceived risk of disease recurrence and increased anxiety.
- Among patients treated with anti–TNF agents before surgical resection who do not continue anti-TNF therapy postoperatively, a strategy of endoscopy-guided therapy may increase the risk of drug reaction from re-exposure to the anti-TNF therapy after a gap of 6 to 12 months and lower efficacy of the index agent.
- The potential risks of the active management strategy of routine endoscopic monitoring encompass the risks associated with colonoscopy. The 30-day risk of serious complications with a diagnostic colonoscopy is estimated to be 0.08% and 0.7% without or with polypectomy/biopsy, respectively. In addition, colonoscopy has added costs and may create a moderate burden to patients related to discomfort, need for bowel preparation, and requiring time off work.
- A strategy of no endoscopic monitoring (and continuation of the strategy adopted in the early postoperative phase) may be associated with a high risk of disease recurrence later in the course of CD. The absence of monitoring may also contribute to patient anxiety, especially among patients who may not have received pharmacological prophylaxis after surgical resection.

See the "Potential harms" sections in the technical review (see the "Availability of Companion Documents" field) for additional information about potential harms.

Qualifying Statements

Qualifying Statements

- Although the guideline panel acknowledged the importance of surgical recurrence, there were an insufficient number of events in clinical trials to inform this outcome. Therefore, prevention of endoscopic recurrence, a strong surrogate measure of surgical recurrence, was evaluated.
- Although identifying patients who are at higher risk for endoscopic and clinical recurrence is paramount in managing postoperative Crohn's disease (CD), there is no validated score based on clinical features that predicts these outcomes. The development and validation of a postoperative recurrence scale would enable more effective implementation of these guidelines. Moreover, the Rutgeerts score, which correlates with natural history based on endoscopic recurrence at the neoterminal ileum, has not been validated for use in clinical trials of postoperative prophylaxis. The optimal frequency of endoscopic monitoring following the initial colonoscopy after surgical resection remains to be determined. Additionally, randomized clinical trials are needed to assess the comparative efficacy of medical therapies after the onset of asymptomatic endoscopic recurrence. Finally, there is a growing armamentarium of biologics for the treatment of CD, and the role of newer classes of biologics for the prevention of postoperative recurrence has yet to be determined.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Clinical Algorithm

Patient Resources

Staff Training/Competency Material

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

Nguyen GC, Loftus EV Jr, Hirano I, Falck-Ytter Y, Singh S, Sultan S, AGA Institute Clinical Guidelines Committee. American Gastroenterological Association Institute guideline on the management of Crohn's disease after surgical resection. Gastroenterology. 2017 Jan;152(1):271-5. [8 references] PubMed

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2017 Jan

Guideline Developer(s)

American Gastroenterological Association Institute - Medical Specialty Society

Source(s) of Funding

American Gastroenterological Association Institute

Guideline Committee

American Gastroenterological Association Institute Clinical Guidelines Committee

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Financial Disclosures/Conflicts of Interest

All members were required to complete a disclosure statement. These statements are maintained at the American Gastroenterological Association Institute (AGA) headquarters in Bethesda, Maryland and pertinent disclosures are published with the report.

Guideline Status

This is the current release of the guideline.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Guideline Availability

Available from the Gastroenterology Journal Web site .

Availability of Companion Documents

The following are available:

- Regueiro M, Velayos F, Greer JB, Bougatsos C, Chou R, Sultan S, Singh S. American Gastroenterological Association Institute technical review on the management of Crohn's disease after surgical resection. Gastroenterology. 2017 Jan;152(1):277-95. Available from the Gastroenterology Journal Web site .
- Regueiro M, Velayos F, Greer JB, Bougatsos C, Chou R, Sultan S, Singh S. American Gastroenterological Association Institute technical review on the management of Crohn's disease after surgical resection. Online supplement. Gastroenterology. 2017 Jan. 35 p. Available from the Gastroenterology Journal Web site .
- AGA process for developing guidelines. 2014 Dec. Available from the American Gastroenterological Association (AGA) Web site .
- The AGA Institute process for developing clinical practice guidelines part one: grading the evidence. Clin Gastroenterol Hepatol. 2013 Apr;11(4):329-32. Available from the Clinical Gastroenterology and Hepatology Web site .

In addition, a continuing medical education activity is available from the Gastroenterology Journal Web site .

Patient Resources

The following is available:

- Managing Crohn's disease after surgery: a patient guide. Gastroenterology. 2017 Jan;152(1):296-7. Available from the Gastroenterology Journal Web site .

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

This NGC summary was completed by ECRI Institute on March 9, 2017. The information was verified by the guideline developer on March 13, 2017.

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